

ABSTRACT OF THE DISCLOSURE

In a packet transmission system, each terminal unit transmits data to a resource monitoring device of a network for sending the data to another terminal unit via the network. The resource monitoring device includes a resource map database and a resource management section. The resource map database stores a resource map in which central points of resources that can be used by the terminal units are described. The resource management section transmits the resource map to the terminal units. Each terminal unit includes a resource detection section and a resource acquisition section. The resource detection section detects resource usage statuses of terminal units that are using resources adjacent to a resource used by the terminal unit, by use of the resource map supplied from the resource monitoring device. The resource acquisition section finds idle resources between the resource used by the terminal unit and the adjacent resources based on the resource usage statuses detected by the resource detection section, and acquires all or part of the idle resources so as to be incorporated in the usable resource of the terminal unit. By employing such resource assignment, the number of messages necessary for the resource assignment can be reduced and thereby delay time due to the resource assignment can be reduced.